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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/695,785 | 10/30/2003 | Tetsuo Fujii | 01-472 | 7735 |
| 23400 | 7590 | 10/24/2006 | EXAMINER | |
| POSZ LAW GROUP, PLC 12040 SOUTH LAKES DRIVE SUITE 101 RESTON, VA 20191 | | | NADAV, ORI | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2811 | |

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,785

Applicant(s)

FUJII, TETSUO

Examiner

Ori Nadav

Art Unit

2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 3-7 and 10-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,8,9 and 20-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 9 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshihara et al. (6,313,529).

Regarding claim 20, Yoshihara et al. teach in figure 1 and related text a dynamic quantity sensor comprising:

a sensor chip 1 including a movable portion 5 at one surface side thereof, wherein the movable portion is displaced under application of a dynamic quantity; and circuit chip 10 for communicating with the sensor chip, wherein the circuit chip is disposed so as to confront one surface of the sensor chip through a gap portion 13 and to cover the movable portion, and wherein the sensor chip and the circuit chip are partially bonded to each other around the gap portion, wherein the movable portion 5 is disposed within a sealed gap 13 that is sealed by sealing the sensor chip and circuit chip (column 8, lines 41-52).

Regarding claim 1, Yoshihara et al. teach in figure 1 and related text a dynamic quantity sensor comprising:

a sensor chip 1 including a movable portion 5 at one surface side thereof and a silicon layer 2 at another surface side thereof, wherein the movable portion is displaced under application of a dynamic quantity and the silicon layer is separated from the movable portion by an insulator 3; and

circuit chip 10 for communicating with the sensor chip, wherein the circuit chip is disposed to confront the one surface of the sensor chip through a gap portion 13 and to cover the movable portion, and the sensor chip and the circuit chip are bonded to each other around the gap portion so that a bonding portion is formed that substantially surrounds and seals the gap portion, wherein the gap portion is sealed by sealing the sensor chip the circuit chip and the gap bonding portion wherein the movable portion is disposed within the sealed gap portion (column 8, lines 41-52).

Regarding claims 2, 5 and 9, Yoshihara et al. teach in figure 1 and related text the sensor chip and the circuit chip are sealingly wrapped by mold material (column 8, lines 41-52), and a lead frame for transmitting electrical signals to an exterior, wherein the sensor chip is bonded to the lead frame on another surface opposite to the one surface of the sensor chip facing the circuit chip.

Regarding claims 21 and 22, Yoshihara et al. teach in figure 1 and related text a spacer 12 substantially surrounds the gap portion 13, wherein the spacer has a predetermined thickness for separating the circuit board from the movable portion.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihara et al. in view of Applicant Admitted Prior Art (AAPA).

Yoshihara et al. teach in figure 1 and related text substantially the entire claimed structure, as applied to claim 1 above, except the sensor chip and the circuit chip are electrically connected to each other by bonding wires.

AAPA teaches in figure 19 and related text a sensor board 10 and a circuit board 20 are electrically connected to each other by bonding wire. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to electrically connect the sensor board and the circuit board of Yoshihara et al.'s device to each other by bonding wire in order to use the device in an application which requires the inclusion of more passive elements in the circuit chip.

Response to Arguments

Applicant's arguments with respect to claims 1-2, 8-9 and 20-22 have been considered but are moot in view of the new ground(s) of rejection.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ori Nadav whose telephone number is 571-272-1660. The examiner can normally be reached between the hours of 7 AM to 4 PM (Eastern Standard Time) Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on 571-272-1732. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



O.N.
10/20/06

ORI NADAV
PRIMARY EXAMINER
TECHNOLOGY CENTER 2800